



C09-EC-406

3472

BOARD DIPLOMA EXAMINATION, (C-09)
MARCH/APRIL—2014
DECE—FOURTH SEMESTER EXAMINATION

AUDIO AND VIDEO SYSTEMS

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. State the need of bass and treble controls in stereo amplifier.
2. Brief about reflection, refraction, diffraction and absorption.
3. What is MP3 format?
4. Draw the picture details while scanning a line.
5. Distinguish between progressive scanning and interlaced scanning.
6. Draw the degaussing circuit of a color TV receiver.
7. Write the function of tuner in TV receiver.
8. Mention the typical characteristics of image orthicon camera tube.
9. List the standards of HD TV.
10. Draw the block diagram of DTH.

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PART—B

10×5=50

- Instructions :** (1) Answer *any five* questions.
(2) Each question carries **ten** marks.
(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 11.** Explain the working principle of DVD player.
- 12.** Explain the methods of sound recording and reproduction on gramophone disc.
- 13.** Sketch the composite video signal and label the parts and explain each one.
- 14.** (a) List the CCIR-B standards. 3
(b) Write the frequency allocation of TV channels used in India. 3
(c) Explain frame and field frequencies. 4
- 15.** (a) Draw the schematic view of a color picture tube. 4
(b) Explain the constructional features and working of a color picture tube. 6
- 16.** (a) Draw the block diagram of a colour TV transmitter. 5
(b) Draw the block diagram of PAL encoder. 5
- 17.** Draw the block diagram of remote control TV receiver. Explain the functions of each stage.
- 18.** (a) Draw the block diagram of CA TV. 5
(b) Explain about CA TV. 5
